DOCUMENT RESUME

ED 391 587 PS 023 796

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TITLE Group Size in Kindergartens: Issues Arising from Changes to Group Size and Other Policy Developments in the Wellington Region Free Kindergarten Association in 1994.
INSTITUTION New Zealand Council for Educational Research, Wellington.
SPONS AGENCY Wellington Free Kindergarten Association (New Zealand).
REPORT NO ISBN-0-908916-77-9
PUB DATE 95
NOTE 60p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Child Behavior; Classroom Environment; *Class Size; *Educational Policy; Educational Quality; Foreign Countries; Group Activities; *Group Experience; Kindergarten; Learning Strategies; Parent Teacher Cooperation; Policy Formation; Preschool Education; *Preschool Teachers; *Teacher Attitudes; Teacher Student Relationship
IDENTIFIERS Caregiver Child Ratio; *Group Size; New Zealand

ABSTRACT

This study examined kindergarten teachers' perceptions of the impact of changes in group-size policy on 3- and 4-year-old children in New Zealand's Wellington Region Free Kindergarten Association. Data were collected through a series of interviews of Wellington kindergarten teachers from 54 kindergartens and focused mainly on the perceived effects of changing group size with regard to parent-teacher relationships, staff and child turnover, and adult-child ratios. The findings show that the changed policy had had a direct impact on children, programmers, teachers, and families. The major issues presented by the teachers are as follows: (1) they had less time to work with individual children and small groups; (2) even though the adult-child ratio remained constant at 1:15, the larger group size had a marked impact on the type of activities teachers were able to offer; (3) teachers were being forced toward a supervisory role; (4) increased roll numbers had an adverse, diluting effect on teachers' relationships with parents; (5) in some kindergartens children were being admitted at a younger age, which placed extra demands on teachers; and (6) there had been little training or support for teachers to cope with the consequences of the new policy. (Two appendices include the kindergarten group size project questionnaire and the interview schedule. Contains 44 references.) (AP)

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GROUP SIZE IN KINDERGARTENS

Issues Arising From Changes to Group Size and Other Policy Developments in the Wellington Region Free Kindergarten Association in 1994

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Group Size and Other Policy
Developments in the Wellington Region
Free Kindergarten Association in 1994

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New Zealand Council for Educational Research
Wellington

1995

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ISBN-0-908916-77-9

Distributed by NZCER Distribution Services
P O Box 3237
Wellington
New Zealand

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ACKNOWLEDGMENTS

We would like to thank all the kindergarten teachers in the Wellington region who so generously gave their time to allow us to conduct the interviews for this study and to the teachers from the Hutt Valley Association who participated in the pilot study. Val Podmore and Anne Meade each conducted 1 group interview. Jenny Watson (NZCER) wrote the literature review using material compiled by Lisa McCauley and Barbara McKenzie.

FINANCIAL SUPPORT

This project was made possible by a grant from the Wellington Free Kindergarten Association. The Waikato Free Kindergarten Association provided funds for the literature review.

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INTRODUCTION

This report presents the findings from a research project carried out on behalf of the Wellington Free Kindergarten Association in an attempt to examine the impact of changes to group size on 3- and 4-year-old children attending kindergarten.

Background

Prior to 1990, most kindergartens had rolls of up to 40 children in both morning and afternoon sessions and were staffed with 2-3 teachers on a 1:20 ratio. Changes to group size and adult/child ratio were introduced with the new early childhood regulations which came into force in 1990.[1] Schedule 3 of those regulations states that the adult/child ratio in kindergartens should be 1:15. No additional government money was forthcoming to finance this improvement. In order to achieve this ratio, the Wellington Free Kindergarten Association felt the best solution was to increase kindergarten roll sizes in order to fund extra staff. However, extra staff could only be appointed to kindergartens which were of a specified square footage. Variation in the size of kindergarten buildings has led, therefore, to variation in roll size. The effects of changes in group size and adult/child ratios were confounded in the New Zealand context because the new regulations were introduced at about the same time as the introduction of salary bulk funding. Funding includes a sessional component which is dependent on attendance figures. This places added pressure on teachers to maintain full rolls.

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[1] See Education (Early Childhood Centres) Regulations, 1990. S/R 1990/261.

LITERATURE REVIEW

"Quality" of early childhood services is an issue which has recently come to the fore in research on early childhood education and care in New Zealand. Studies such as one by Vandell, Henderson, and Wilson (1988), which found that quality of care could have long-term effects on a child's development, have led to attention being more focused on quality issues. Research is currently examining the effects of regulable variables, such as adult/child ratios, caregiver training, curriculum, and group and centre size (for example, Farquhar, 1991; McDonald, Podmore, Renwick, Smith, Vize, and Wylie, 1989; Podmore, 1993, 1994; Wylie, 1989). Group size and adult/child ratios have been seen as particularly important influences on children's development.

Generally this review has focused on research into the effects of group size and staff/child ratios on 3- to 4-year-olds, so that the age range is comparable to the New Zealand kindergarten children in the current study. Because kindergartens in the United States cater for older children, up to the age of 6 years, and because there is more research available in the area of the effects of group size in childcare, American research examining childcare and daycare centres has been included.

One area in the research which can become confusing, is the use of terminology explaining staff/child and child/staff ratios. In this review, "high staff/child ratios" refer to a high number of staff to children. However, in quotes from some studies, "low child/staff ratios" have been referred to, meaning low numbers of children per staff member. These should not be confused with "low staff/child ratios" and "high child/staff ratios" which mean that there are few teachers to the number of children.

International Research

Adult/Child Ratios

Extensive research has been conducted in this area in the United States in recent years. From the studies selected for review, it can be seen that research offers contradictory findings of the effects of these variables on a child's social, emotional, and cognitive development. In general, studies in the United States and Australia have found that high adult/child ratios (few children per teacher/caregiver) have beneficial effects on children aged 3 to 5 years (Howes, Phillips, and Whitebook, 1992; Howes, and Whitebook, 1991), whereas studies from countries such as Japan and France suggest that children in classrooms with lower adult/child ratios are more sociable with their peers and more group oriented (Howes, and Marx, 1992; Tobin, Wu, and Davidson, 1987). Research on group

size follows a similar pattern, with many researchers in the United States finding that there is an optimum group size for peer interaction, but that larger groups have detrimental effects for both the children and the teachers/caregivers (Collins, 1983; Cummings, and Beagles-Ross, 1984; Kisker, 1992; Ruopp, Travers, Glantz, and Coelen, 1979; Travers and Goodson, 1981; Watts, and Patterson, 1984). However, studies from Japan and France have found that larger group sizes are useful for fostering group membership and peer interaction (Howes, and Marx, 1992; Tobin, Wu, and Davidson, 1987).

A number of studies have found that higher staff/child ratios in early childhood centres lead to gains in cognitive development, social competency, a higher standard of care, and experience with more developmentally appropriate activities. In one study, Howes and Whitebook (1991) compared childcare centres governed by one of two sets of regulations in California state. One set of standards (Title 5) is required in all state-subsidised childcare centres. In the Title 5 standard, infants must have a 1:3 ratio of caregivers to children, toddlers a 1:4 ratio, and preschoolers a 1:8 ratio. The children in these centres tend to come from lower income families, have special needs, or are classified as "at risk" of abuse or neglect. Title 22 standards are the other set of regulations. In centres where these standards apply, infants must have a 1:4 ratio, toddlers a 1:6 ratio, and preschoolers a 1:12 ratio. At these centres, the children are generally from average to high socioeconomic groups. In the study, centres were rated on the Early Childhood Environment Rating Scale - ECERS (Harms and Clifford, 1980 cited in Howes and Whitebook, 1991) and ITERS (Infant-toddler version). Results showed that toddlers and preschoolers were more likely to experience developmentally appropriate activities in classes meeting the Title 5 standards in comparison with those children in classes meeting the Title 22 standards, or with even poorer ratios. It was also found that there were other differences between classes with Title 5 and Title 22 standards, such as the amounts of appropriate caregiving, teacher sensitivity, teacher harshness, and teacher detachment experienced by the children, as well as social competency with peers. In fact Howes and Whitebook suggest that the benefits of emotional support of peers and the learning of social skills are less likely to occur as ratios increase - "The jump is particularly notable for preschoolers when the ratio increases from 1:8 to 1:9 or 1:10" (Howes and Whitebook, 1991 p. 17).

A more recent study by Howes, Phillips, and Whitebook (1992) examined the quality of children's relationships with adults and peers, and the effects of the Federal Interagency Day Care Requirements (FIDCR) for ratios and group size on these relationships. More than 400 children (infants, toddlers, and preschoolers) participated. The children's relationships with adults and peers were rated in terms of attachment behaviour - secure, avoidant, or ambivalent - social orientation, and peer interaction. Analysis showed that infants in classrooms with ratios of 1:3 or better, toddlers in classrooms with ratios of 1:4, and preschoolers with 1:9 were the most likely to experience a high standard of appropriate care, and developmentally appropriate activities. It was noticed that those children who were in childcare rated as high quality tended to have a more secure

relationship or attachment to the caregiver, and that those who were more secure with the caregiver tended to be more socially competent with peers.

While the results of these studies are straightforward, results of other studies are more complicated. Phillips, Scarr, and McCartney (1987) found that there are positive and negative effects of having high staff/child ratios. They hypothesised that those children who were attending a high quality childcare centre would show greater social competence and adjustment. Nine childcare centres in Bermuda were targeted for study, and 166 children, 3 years and older, participated. Information on family background and childcare history was gathered, along with measures of social development and quality of verbal interactions. Quality of the childcare environment was measured using the ECERS, and programme directors were interviewed for information on staff training and experience, staff/child ratios, play equipment, and parent involvement. Across the 9 centres, staff/child ratios varied from 1:5.7 to 1:15. A hierarchical regression model was used to assess the influence of separate quality indicators such as staff/child ratios. Results showed that a child's social development was significantly affected by overall quality of the childcare centre. Of the specific quality indicators, the director's experience and the amount of verbal interaction between caregivers and children were the 2 variables which consistently predicted a child's social development. Staff/child ratio had a much lesser degree of influence, but corresponded with greater considerateness as rated by the parents. However, it was found that a child's anxiety, as rated by the caregivers, corresponded with staff/child ratios, so that children in centres with higher ratios of more caregivers to children were rated as more anxious. This last finding appears to contradict other research which shows only positive effects of high staff/child ratios, and is left unexplained by Phillips *et al.* (1987) except to say that "the link between ratios and anxiety . . . challenges one's intuitive views of child-care quality as well as the thrust of most research evidence" (p. 542). King and MacKinnon (1988) have tried to explain these contradictory results by suggesting that it may not be possible to study the effects of staff/child ratios in isolation from total group size. They also proposed that the size of staff/child ratios may be more important for those children aged under 3 years.

Field (1980) also found that it was difficult to study the effects of staff/child ratios independently of other variables. Her study was designed to observe the effects of staff/child ratios and organisation of classroom space on children aged 3 to 4 years. In the study, 20 children were selected from 4 classrooms in a university teacher-training facility. The classrooms had been arranged so that staff/child ratios and organisation of classroom space were varied. Random observations of the children were made, and their behaviours coded. Analysis of these observations showed that the children in the classes with the higher teacher/child ratios and partitioned classroom space showed more "optimal" behaviours, such as interactions with peers, verbal interactions, fantasy play, and associative-co-operative play. However, this was not found when just one of the two variables - teacher/child ratio or organisation of classroom space - was varied. From these results, it appears that the teacher/child ratio does have some effect on the development of

peer interactions, and fantasy and associative-co-operative play, but that it acts alongside other classroom variables, and is difficult to identify as an independent factor in the quality of childcare. As Conboy (1980) notes, "Child-staff ratio cannot be depended upon alone as a reliable indicator of quality care. Preferences for certain children, and active outgoing children who make demands on a caregiver's time, often result in an inequitable distribution of attention" (p. 3).

Another study, conducted by Clarke-Stewart and her students (Clarke-Stewart, 1991), has found positive effects of having more children per teacher/caregiver. Clarke-Stewart examined 4 different forms of childcare, including full time care in a childcare centre, as well as the features or quality indicators within each of the four forms of childcare. A total of 80 families were involved in the study, and information on childcare arrangements; parents' work statuses, income, and education levels; and child-development training was gathered from parents and caregivers. Observations were also made of the children during childcare, and assessments of their psychological development conducted in a university laboratory playroom. Eight different measures of developmental competencies were taken - autonomy, social reciprocity with mother, social knowledge, sociability with adult stranger, sociability with an unfamiliar peer, negative behaviour to the peer, social competence at home, and cognitive ability. In the childcare centres it was found that those children in classes with lower ratios (more children per caregiver) were more co-operative than those in classes with higher ratios. These findings are consistent with those of Ruopp, Travers, Glantz, and Coelen (1979), "that a high adult-child ratio . . . is not necessarily a predictor of better outcomes for preschool children" (Clarke-Stewart, 1991, p. 37). Over all, however, Clarke-Stewart concluded that quality childcare programmes did have a direct effect on the children's cognitive development and on the gains in cognitive development made after they entered the childcare programme. This suggests that specific quality indicators do not independently affect the overall quality of a programme, but have a joint effect.

A study on staff/child ratios in preschools in Japan by Tobin, Wu, and Davidson (1987) has made some interesting observations which point to the cultural specificity of the findings of American researchers. In their study, they found that Japanese parents and caregivers preferred children to attend preschool where there were much lower adult/child ratios (more children per caregiver/teacher). The reason for this is that "in Japan, where group relations are emphasised over dyadic bonds, a preschool teacher is less likely to play a mother-like role vis-à-vis the children in her care" (Tobin *et al.*, 1987, p. 538). It was found that the Japanese thought that if the ratio dropped to below 1:20 the children would have more access to teacher time and attention, and would therefore become less independent, threatening the group ethos. In this setting, preschool teachers from the United States found that the children were very noisy, that arguments and fights were arbitrated by peers rather than the teacher, and that there was a general feeling of chaos. The researchers suggested that the United States needs to think of the costs and benefits of high staff/child ratios. They reiterated a suggestion by Lewis (1984, cited in Tobin *et al.*,

1988) that "these costs may include an overreliance on the teacher as disciplinarian and keeper of the peace with the undesirable side effect of preventing children from coming on their own to an understanding and acceptance of the need for self-control and internalised rules of conduct" (p. 546).

Other research which points to cultural differences in ideas about quality of childcare, comes from Howes and Marx (1992). In this study child care practices in the United States were compared with those in France. According to Howes and Marx, nearly all 3- to 6-year-olds in France go to a publicly supported childcare centre. Within these centres the staff/child ratio varies depending on the age of the children and on the level of education of the teachers. In France, only professionals are counted within the adult/child ratios, but generally there are assistants and other parent helpers also present. The observed ratio for infants was 1:5, for toddlers it was 1:8 (*Crèches collectives*), and for preschoolers it was 1:28 (*Écoles maternelles*). The ratio for preschools is high in comparison to those of childcare centres in the United States and New Zealand, and some French teachers have been suggesting that it is too high. However, Howes and Marx note that children in French childcare tend to spend less time in activities with adults and more time with their peers, and this upholds what many teachers believe that "through child-child interaction the children are socialised to belong to a group" (p. 361). During their observations of French childcare, the researchers noticed that programmes have to be more carefully planned and structured because of the larger groups, and all children are constantly monitored. These observations concur with those of Tobin *et al.* (1987) in Japanese childcare centres. It seems that for preschoolers in these countries there is little if any emphasis on the caring and nurturing role prescribed for caregivers in the United States, with a much greater importance placed on a child's independence and group membership.

Group Size

Studies on group size, as an indicator of quality early childhood education and care, have mostly originated from the United States. One of the more prominent of these is the National Day Care Study - NDCS (Ruopp, Travers, Glantz, and Coelen, 1979; Travers, and Goodson, 1981). According to Collins (1983), this study was designed to examine the cost and quality of childcare programmes, with particular emphasis on the effects of staff/child ratios, group size, caregiver qualifications, and other regulable variables. In the study, children in 64 daycare centres in Atlanta, Detroit, and Seattle, were observed, and parental attitudes surveyed. There was also a quasi-experiment conducted in 49 centres, with variables such as staff/child ratios manipulated. One of the key findings in this study was that smaller group sizes have a favourable impact on classroom behaviour and children's development. For example, it was found that in classes with smaller overall group size, regardless of staff/child ratios, teachers were more actively involved with the children, interacting with them rather than just managing and controlling them. Children responded to this by being more co-operative, more involved, and less hostile. Of the

many conclusions drawn from the findings of the study, review articles most often note the conclusion that group size was the "single most important determinant of children's experience" (Ministry of Community and Social Services in Ontario, 1991, p. 45). In the words of Ruopp *et al.* (1979) "small group sizes, specialized training of classroom staff and, to a much lesser extent, higher staff/child ratios are associated with good classroom process, positive caregiver and child behavior and accelerated gains on tests predictive of children's later school achievement" (p. 137). In a list of recommendations for Federal Day Care Requirements, the NDCS suggested that for children aged 3 to 5 years the ratio of staff to children should be no more stringent than 1:7 and that group size should be only twice that number of children. In a review of state childcare regulations (Comparative Licensing Study - CLS) over the period of 1978 to 1982, Collins (1983) discussed the impact of the National Day Care Study (NDCS), on these regulations. The author noted that while the NDCS demonstrated in "a scientifically conclusive way that certain regulatable program characteristics were associated with behaviours of children and caregivers and with children's gains in the cognitive, language and socioemotional domains" (p. 4), these regulable variables have not since been altered in most states. Collins maintained that the NDCS had the "prescription" for quality care - "small groups supervised by lead caregivers with career preparation in child development and early childhood education" (p. 4). He also suggested that although staff/child ratios are significant, they become less so when examined independently of group size. As a result, he suggested that ratios need to be re-examined as a yardstick for regulating childcare. A table taken from the Comparative Licensing Study shows the staff/child ratio and group-size requirements for 4-year-olds in childcare centres. Staff/child ratio requirements in March 1981 varied between 1:5 and 1:20, with every state having a stipulated level. For group size, however, only 21 states, plus the District of Columbia, had any requirements in effect. These ranged from 10 to 45 in a group, regardless of staff/child ratio. According to Collins, these "data reveal all too clearly . . . that little, if any, progress has been made in adopting requirements about group size that reflect recent research" (p. 9).

In a study of childcare centres in the state of Pennsylvania (Kontos and Fiene, 1991), regulable variables were examined for their influence on child development. A random sample of 10 centres was selected, from which 100 children participated. Centre quality was measured using 4 instruments - the Child Development Program Evaluation Scale (CDPE), the CDPE Indicator Checklist (CDPE-IC), the Caregiver Observation Form and Scale (COFAS), and the Early Childhood Environment Rating Scale (ECERS). All these instruments, except for the ECERS, had been developed by Fiene and colleagues previously. Seven centre characteristics were examined, including staff/child ratio and group size. Measures of intellectual, language, and social development were also obtained for all the children, as well as family-background information. Analysis of the data showed that there was a negative relationship between staff/child ratio and quality of care as measured by the different instruments. These results are in line with those from the National Day Care Study. Group size, however, was found to be positively related to

quality. This means that greater numbers of children in childcare together were found to have a positive relationship with the overall quality of the centre. This was an unusual finding, and could be due to the fact that the centres only ranged in quality from adequate to very good. It is possible that, if there had been some centres with a very low level of quality, "the differential effects may become salient due to detrimental effects of low quality care on children's development" (p. 76). Overall results showed that family background contributed more to variation in children's development than did the quality indicators of the individual centres. Kontos and Fiene warn, however, that these results should not be used as a reason to deregulate childcare, because they are only representative of a small sample of 10 childcare centres, and may not be representative of all child care centres. Another reason is that "researchers have yet to determine at what point an effect can be said to have a substantive impact on development" (p. 77). Finally, they suggest that the study warrants replication, so that more conclusions can be drawn on the effects of specific indicators of quality, as well as the overall quality of a particular centre.

According to Howes *et al.* (1992), both staff/child ratios and group size make a difference to the quality of care. They found that for 3- to 6-year-olds, a group size of more than 18 children together led to a lessening in experience with developmentally appropriate activities. These results led them to the conclusion that group size is related to the provision of developmentally appropriate activities and that there is a "pathway from group size to developmentally appropriate activities to social competence with peers" (p. 459). This conclusion reflects the suggestion by Howes *et al.* (1992), that structural variables, such as group size and staff/child ratios influence process variables, such as teacher/caregiver behaviour, which in turn affects the development and social competencies of the children in childcare.

In an earlier study, Clarke-Stewart and Gruber (1984) examined 4 forms of child care and the features of each form. They found that children in home settings where there were no other children, or many other children, were less socially competent with their peers. From this they reasoned that "there may be some optimal number of children that fosters the development of social skills" (p. 50). In the centres where there were larger numbers of children, it was found that the children were lower in social cognition and social competence. However, it was also found for 2- and 3-year-olds that children from larger group sizes had better social perspective or role taking. Other factors which were found to affect the children's social development were teacher/caregiver training, physical environment, and curriculum.

Leu and Osborne (1990) concluded that "when selecting child care, parents need to remember the three basic components of high quality child care: small group size, low child/staff ratios, and a quality trained staff" (p. 98). They suggested that the effects of having larger groups of children in early childhood education or care, were less contact between parents and caregivers/teachers, less contact between caregivers/teachers and the children, and more "forced" peer interactions. It was also suggested that the lesser amount of contact between caregivers/teachers and the children contributed to inadequate language

stimulation and a lack of security and affection.

In a study focusing on the factors influencing children's responses to separation in daycare, Cummings and Beagles-Ross (1984), proposed that a child's experience is determined by group size, organisation of space, and caregiver stability and training. They attributed this to the fact that there is likely to be increased teacher/child interaction when the group size is smaller, and that greater teacher involvement also encourages greater levels of child participation and interest. In their study on the effects of these factors on separation response, Cummings and Beagles-Ross found that the children from the centre with smaller numbers of children (between 8 and 12 children) showed more positive effect prior to separation, less avoidance during entry to the childcare facility, and spent less time searching for their mother following separation, than did the children from the larger centre (20 to 25 children). These findings indicate that the children from the smaller centre had higher levels of felt-security than did those from the larger centre. Caregiver stability was also found to be an important factor in predicting separation anxiety, and it was noted by the researchers that "greater caregiver stability, appeared to be more important when another element was of lower quality, i.e., larger group size" (p. 171). For this reason, Cummings and Beagles-Ross maintained that small group size and caregiver stability have interactive effects.

Other researchers who have also noted the difficulties in defining specific quality indicators which have an independent effect on the quality of childcare, are Kisker (1992) and Watts and Patterson (1984). Kisker emphasised that high quality early childhood education must consist of a combination of quality indicators including group size. She proposed that "the highest-quality settings are those that combine small group sizes, low child-staff ratios, well-qualified and stable caregivers, and program activities that allow for structured but child-initiated learning and do not include large amounts of unstructured free play time" (p. 30). Watts and Patterson proposed that it is not easy to determine the optimum group size or staff/child ratio for all children aged 0 to 6 years. In fact they suggested that "The size of the group to be preferred at any one time depends on a whole cluster of variables: the activity, the nature of the participating children (especially in terms of assertiveness/dependency), the presence of children with special needs, the group interrelationships (especially with older groups), the age range in the group, . . . and the personality of the staff member (there being considerable variation in the degree to which adults can cope adequately and developmentally with a group of a given size" (p. 16).

British research has also mentioned group size as having an effect on the quality of early childhood education and care (for example, Bennett, 1992). In Britain, as well as kindergartens, playgroups, and other childcare centres, there are "reception classes" for under 5-year-olds. For these centres, in particular, group size, a lack of trained ancillary staff, poor resources, and classes made up of wide age ranges of children, create a lower quality of education and care. Bennett has suggested that improving the quality of this form of care for the under 5s is important because it is preferred by parents. This is because it is considerably cheaper than other forms of early education and care, and tends

to offer full-time rather than sessional care.

Studies in Japan and France, however, declare that larger class sizes can be beneficial for preschoolers, by introducing them to a structured environment at an early age and promoting independence and a sense of identity within a group. Tobin *et al.* (1987), in their study of Japanese preschool, suggested that "In an era in which family size has shrunk and extended family and community networks of kin, neighbours, and friends are feared to be unravelling, large class size and large ratios have become increasing important strategies for promoting the traditional Japanese values of groupism and selflessness and for combating what many Japanese believe to be the dangers of Western-style individualism" (pp. 542-543). Howes and Marx (1992) also maintained that "despite caring for large numbers of children, there is a minimum of teacher harshness and restriction" (pp. 364-365) in French preschools.

Research from Australia has noted difficulties for early childhood services in preserving the levels of quality recommended by recent research. Stonehouse (1988) described increasing pressure on early childhood teachers and caregivers. She suggested that the nature of pressures on staff are well known, and include the high rate of staff turnover, use of unqualified or underqualified staff, low staff/child ratios, large group size, the low value placed on childcare as a career by the community, lack of funds, "and all of this alongside increasing demand for the services" (Stonehouse, 1988, p. 25). She also noted that quality childcare is expensive. As Howes (1991) has also maintained, "quality is expensive and often sacrificed because of cost-cutting measures of public agencies or profit motives of private operators" (p. 30).

A recent literature review from Australia has supported the relevance of small group-size to the quality of care received by young children. Ochiltree (1994), who examined research by Bruner and by Ruopp *et al.*, reaffirmed the importance of small group-size to preschool-aged children's fantasy play, their social interactions with their carers, and their co-operation and creativity.

One problem in Australia which has long-lasting effects on the ability of centres to reduce group size is the current policy of the Capital Works Program to cut building times for new centres (Farmer, 1991). This is done through co-operation with local and state governments, with provision of building sites and a standard building design. There are several different designs, but all cater for 40 children from 0 to 5 years of age, in 2 rooms. According to Farmer, there is "no provision . . . made to allow for even the possibility of caring for children in smaller groups" (p. 543). Although alterations can be made to the design, the centre is responsible for the expense of these alterations. She also noted that "While it is important to have a building program that allows for centres to be built quickly to meet the growing need, consideration needs to be given to providing designs which allow a variety of programming possibilities" (p. 543).

New Zealand Research

Several recent New Zealand studies have also examined early childhood education and care services and what constitutes quality of care. Among these are studies by Farquhar (1991), Podmore (1994), Sims (1994), Smith, Inder, and Ratcliff (1990), Smith, McMillan, Kennedy, & Ratcliff (1988), and Wylie (1993).

In the late 1980s, Smith, McMillan, Kennedy, & Ratcliff (1988) conducted a study on the effects of raising staff/child ratios, after the introduction of an extra teacher into some kindergartens in Wellington and Auckland. After the arrival of a third teacher, child and teacher observations were made, teachers were interviewed, and parents were asked to complete questionnaires. Analysis showed that there was a significant effect on the amount of negative peer behaviours such as children's arguments and aggressive behaviour. Children also had more interaction with the teachers, and showed an increase in prosocial play with peers. It was concluded that there were some very positive effects of introducing an extra teacher into kindergartens with group sizes of 40 children. However, it was also suggested that "the introduction of a third teacher into kindergartens is only one of the kind of changes that kindergartens need to face up to in a changing society. It is to be hoped that such changes as smaller group size, longer hours of operation, and cross-age groups of children will occur in the future. The present researchers would welcome such changes but hope that they also will be accompanied by systematic evaluation" (p. 23).

In a report to the Ministry of Education, Smith, Inder, and Ratcliff (1990), cited research by Holloway and Reichhart-Erickson (1989) which concluded that group size and the quality of teacher/child interactions, contribute independently to children's social development. In the study it was found that "High quality caregiver-child interaction was associated with more prosocial responses" (Smith *et al.*, 1990 p. 9-10). The authors also cited a number of studies (for example, Haskins, 1985; Howes, 1988, 1990) which show that quality of early childcare has an effect on social behaviour in kindergarten, and that the total early childhood education and care experience has effects on behaviour in the primary school. In their own research, Smith *et al.* (1990) could find no evidence that any of 4 forms of early childhood education and care had an effect on social behaviour in primary school. However, they noted that it had not been possible in the study systematically to measure the quality of the different childcare settings, although it was thought by the authors that most of the children came from childcare centres of "above average" quality.

Farquhar (1991), in a report for the Ministry of Education in New Zealand, noted that according to parents, staff, and experts, the most important factors in quality early childhood education and care were - "staff are responsive to children, . . . activities are developmentally appropriate, toys and equipment are safe and kept well maintained, staff show children they care about them, children are supervised at all times, staff work together as a team, staff are warm and caring people, parents and families are made to feel welcome, and group size (children attending) is not too big" (p. 30). Farquhar used a multimethod approach, utilising questionnaires, group discussions, and observations of

children in 4 forms of childcare (kindergarten, playcentre, childcare centre, and kohanga reo) to study the nature of quality early childhood education in New Zealand, and to fill in a perceived gap in research in the area internationally. The study was intended to examine broadly the attitudes of parents, caregivers, and teachers on the issue of quality and experiences of early childhood education services in New Zealand. Farquhar rightly considered that, because most of the research in the area of quality childcare had been conducted in the United States, there was a need to examine the issue from a different perspective. Her study found that the group-size factor was rated by the parents as one of the important indicators of quality, especially in kindergartens and childcare centres. Parents of children enrolled at kohanga reo, while acknowledging that group size was one of the important variables in quality service, did not consider it one of the most important (Farquhar and Laws, 1991). In a paper presented at a NZARE conference late in 1991, Farquhar mentioned group size as one of the factors found to be significantly more important to parents with children at either kindergarten or childcare centres, than it was to parents of children at playcentres.

Smith (1992), in a comprehensive review of literature on children's development, emphasised the importance of staff/child ratios and group/class size in the development of language skills. According to Smith, "In infant daycare centres, the more infants there are per caregiver, the more time staff spend on management and control techniques, and the less on teaching" (p. 174). She suggests that, when group size is larger than 15, there is more inappropriate behaviour from the children and fewer favourable interactions between the children and the adults. "When teachers are constantly in a supervisory role or moving from one activity to another, there is little chance of encouraging language" (p. 175). These comments support those made by kindergarten teachers in the study by Sims (1994), as well as supporting the findings of the National Day Care Study.

Wylie (1993) examined the impact of salary bulk funding on kindergartens in New Zealand. She found that for head teachers there was a new burden of increasing roll numbers, keeping rolls full, and working with increases in the size of groups of children. She also reported that head teachers noted "reduced time for planning and professional development, working with parents, and the increase in stress which comes from not being able to meet all the demands on them" (p. 25). Senior teachers were also concerned about the increase in group size, and what it means in terms of catering for children with special needs.

In a recent study on the effects of increased rolls on New Zealand state-funded kindergartens, Sims (1994) conducted a survey of kindergarten teachers in Palmerston North, Wanganui, and Napier. The majority of teachers surveyed agreed that the quality of their programmes had suffered due to the increased rolls, that teacher/child interactions had been affected, that workload had increased, that supervision had become more difficult, that the noise levels had increased, that the buildings, outside area and equipment were no longer sufficient, and that job satisfaction had been affected. The qualitative nature of these data means that the author has gained access to the personal attitudes of the

kindergarten teachers surveyed. Although it is not clear whether the teachers who responded to the survey are representative of kindergarten teachers all over New Zealand, it is likely that many teachers in New Zealand feel the same way.

In fact, the comments of the teachers in Sims's (1994) study are supported by concerns voiced at kindergarten paid union meetings held in late 1993. A total of two-thirds of all kindergarten teachers in New Zealand attended these meetings. In the report which summarises the findings of these meetings, notes on the discussion about the effects of large group size indicate that kindergarten teachers were greatly concerned about the increase in group size. Teachers suggested that the increased numbers of children, regardless of staff/child ratios, have led to increased workloads, more administration, children with special needs not catered for, concern over bulk funding, higher levels of stress leading to problems with teacher health, higher noise levels, and teachers generally being under pressure. They also mentioned an increase in accidents and an overall effect on the quality of their programmes. In order to combat these problems, teachers proposed a range of action strategies. Among those discussed were suggestions such as working more closely with parents, employing teacher aides, gaining sponsorship from the community, disseminating research to parents and others, and conducting their own research by monitoring what happens in their own kindergartens. Other ideas proposed included having a sit-in in parliament and inviting members of parliament to visit kindergartens, in order to bring their problems to the attention of the government. These are just a few of the ideas presented in the report, but they highlight the amount of concern of kindergarten teachers in New Zealand over the problems associated with increased group sizes.

At a recent early childhood education conference (Hanna, 1994), participants agreed on a number of indicators of quality services. Among these were staff/child ratios and group size. Other quality indicators noted were planned, childcentred, educational programmes, stability of staff and children, trained staff and ongoing training and support, active parent participation, language maintenance, and cultural revival.

Summary

Recent research has shown that there are varying views on how large an effect group size and staff/child ratios have on the quality of early childhood education and care. It is generally agreed that group size has at least an equal, if not greater, effect on the social, emotional, and cognitive development of children, to that of staff/child ratios. In countries such as France and Japan, where belonging to a group is seen as an important part of a child's socialisation, larger classes of 3- to 5-year-olds are seen as maintaining the group ethos. However, in countries such as the United States, Great Britain, Australia, and New Zealand, where individualism is seen as more important, smaller group sizes, and higher ratios of staff to children, are considered optimal.

This review of literature demonstrates that there is very little research in New Zealand which deals specifically with the issues of group size and staff/child ratios. While some

New Zealand studies have included small sections on these variables, there is a need for more in-depth analysis and discussion. Podmore (1994) suggests that "In New Zealand, both the quality of early childhood centres and the provision of early childhood education and care compare favourably with the U.S." (p. 16). This may be so, but it is also important to remember that most of the American findings are culturally specific to lower and middle-class white American children. New Zealand kindergartens, which cater for children from many different ethnic and socioeconomic backgrounds, have larger group sizes than do many childcare centres in the United States, and therefore New Zealand research is needed to assess the effects of large group sizes in kindergartens in this country.

METHODOLOGY

The Association had originally hoped that an experimental study which included observations of children could be undertaken. This was not a feasible option because of the high cost of such a study. Data were collected through a series of focus group interviews of Wellington kindergarten teachers. Questions focused mainly on the perceived effects of changing group size with reference to parent/teacher relationships, staff and child turnover, and adult/child ratios.

The Sample

The sample was drawn from the 54 kindergartens in the Wellington Kindergarten Association. Kindergartens were selected using a stratified sampling procedure, with group size as the selection variable.

The sample for focus groups was drawn from 3 contrasting groups: kindergartens with a 45:45 or 44:44 roll (totalling 90 or 88 children); kindergartens with a 45:30 roll (totalling 75 children); and kindergartens with a 30:30 roll (totalling 60 children). An advantage of sampling in this way was that, while the ratios remained the same at 1:15, there was a definite contrast in group size, which allowed for clearer conclusions to be drawn about the effects of group size rather than ratios.

Within the Wellington Kindergarten Association there were:

- 6 kindergartens with a 30 morning roll/30 afternoon roll
- 2 kindergartens with a 45 morning roll/30 afternoon roll
- 11 kindergartens with a 45 morning roll/45 afternoon roll
- 3 kindergartens with a 44 morning roll/44 afternoon roll

The afternoon rolls were usually the same as morning rolls but in 7 kindergartens fewer children attended in the afternoon.

Change in Group Size

Teachers were interviewed from 22 kindergartens. Most of these had experienced a change in group size since 1993 but there was a considerable range in the actual change experienced and in 7 kindergartens the teacher/child ratio had improved.[2] Figure 1

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[2] According to the Wellington Kindergarten Association records, the teacher pupil ratio in 13 kindergartens within the Association improved as a result of the new policy.

attempts to summarise the changes to group size that had occurred since 1993.

Figure 1
Changes to Kindergarten Group Size Since 1993

Group Size 1993	No. of Teachers 1993	Group Size 1994	No. of Teachers 1994	No. of Kindergartens N = 22
30/30	2	30/30	2.0	3
25/25	2	30/30	2.0	1
--	--	30/30 (new kgtn)	2.0	1
40/40	2	30/30	2.0	1
25/25	2	30/30	2.0	1
44/40	3	45/45	3.0	1
40/40	2	45/45	3.0	4
40/40	3	44/44	3.0	1
45/40	3	45/45	3.0	2
40/40	3	45/45	3.0	5
40/40	2	44/30	2.5	1
40/40	2	43/30	2.5	1

It will be seen from Figure 1 that:

- 1 kindergarten was a new kindergarten so comparisons could not be made with prior experience at that kindergarten;
- 3 kindergartens had maintained both their teacher/pupil ratio and their group size;
- 12 kindergartens had had an increase in group size and an increase in teacher/pupil ratio;
- 6 kindergartens had an increase in group size but a decrease in teacher/pupil ratio, and
- 1 kindergarten had had a decrease in group size and a decrease in ratio.

According to the Association, kindergartens vary in their roll size for 2 reasons:

1. The length of the waiting list. If it was considered unlikely that a 45/45 roll could be

sustained, the afternoon roll was usually dropped to 30 which was considered to be a sustainable number.

2. The variation between kindergartens of having 42, 43, or 44 children on the roll relates to the requirements of the Ministry of Education with regard to minimum space per child.

One consequence of the change in group size was that as rolls increased in a number of kindergartens, new positions were created and more teachers employed. Ten full-time teacher positions and three .6 positions were advertised in the *Education Gazette* of 18 December 1992. There were also instances where a reduction in group size meant a few part-time .6 positions were created, which suited some employees.

The Research Questions

On the basis of our discussions with the Wellington Region Free Kindergarten Association, 4 main questions were isolated to be examined through the study:

1. What is the impact of group size on 3- and 4-year-old children attending kindergarten?

2. How does the overall group size impact on the children in relation to:
   - groupings
   - turnover
   - waiting lists
   - teacher/child ratio and interaction
   - learning and development?

3. Does the size of the group affect teacher stress/pressure levels?

4. How does group size impact on teacher/parent communication and family involvement?

The Group Interviews[3]

Kindergartens with a similar roll size were distributed geographically across the association, but the group interviews were arranged so that the teachers attending any one session were all from kindergartens with the same or similar rolls, and close enough for staff to travel to the kindergarten selected as the venue for the group interviews. The focus group interviews included staff from 2 or 3 kindergartens. The number of staff present at any one interview ranged from 4-9, most being about 6. The interviews, which took about 1½ hours, were held on Wednesday and Friday afternoons during teacher non-contact time. Two researchers were present - one acting as facilitator and the other as

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[3] For a copy of the group interview schedules see Appendix II.

recorder. The group interviews were recorded with the consent of the participants to provide back-up for later analysis.

As with all qualitative research tools, group interviews have their strengths and weaknesses, but they fulfilled our purpose well. The interviews, which were in the form of a group discussion, provided a helpful forum for the exchange of ideas. The effects on children could not be measured in this way, but the group interviews did allow participants to tease out their perceptions of the interactive effects of certain variables related to group size. Judging by their comments, the teachers found the chance to "speak their mind" of value, if only in a therapeutic sense. A danger of group interviews is that single speakers can dominate. Many comments were made by head teachers and we had to be careful to seek the opinions of other teachers. We were also mindful of the fact that when interest groups of this kind are brought together it is easy for discussion to degenerate into "gripe" sessions. One commentator has described such a possibility as ". . . an infectious downward spiral of shared awfulness" (Watts, 1987). However, we did feel that teachers tried to be honest and fair in their comments. If critical comments dominated the discussion about increases in group size, it was because of the strength of their negative opinion about the group-size policy. As will be described later, group size was not the only change which received critical comment.

The Questionnaires[4]

Prior to the group interviews, each teacher was sent a short questionnaire asking them 2 broad questions relating to the impact of group size so that they had a chance to think about and record their views on the main issues before taking part in group discussions. Head teachers were asked to supply demographic information about the kindergarten and children.

Demographic Information about the Kindergartens and Families in the Sample[5]

The families of 13 of the kindergartens were described by the teachers as mainly pakeha/European, with 8 being described as of mixed ethnic backgrounds. English was the language most commonly spoken by children outside the kindergarten in all but one kindergarten where most children spoke a Pacific Island language. The parents in half the kindergartens were in paid full-time employment. Eight teachers said parents in their kindergarten reflected a wide range of employment patterns, and at 2 kindergartens parents were mostly unemployed.

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[4] For a copy of the questionnaire see Appendix 1.

[5] These data are based on the pre-interview questionnaire from 21 of the 22 kindergartens involved.

IMPACT ON KINDERGARTENS OF THE CHANGE IN GROUP-SIZE POLICY

General Overview

The kindergarten teachers interviewed fell into 3 broad groups:

- those in 30/30 kindergartens with 2 teachers
- those in 44/44 or 45/45 kindergartens with 3 teachers
- those in 44/30 or 43/30 with 2.5 teachers

While the teachers across groupings reflected similar concerns, they also provided useful points of contrast. In general, the teachers from the 30/30 kindergartens and those from 44/30 or 43/30 kindergartens were the most satisfied with both the size of their total group of children and the adult/child ratio; and those from the 44/44 or 45/45 were the least satisfied.

Administrative Load

Where teachers across all kindergartens did share a concern, it was in their negative reaction, forcefully expressed, to increased administrative loads. This included such things as:

- the requirement for all parents to sign a roll each month, particularly time consuming with families for whom English was not their first language
- the time taken to write children's profiles
- group contracts between teachers
- the consequences of the sexual-abuse policy
- increased record keeping and documentation required by the Kindergarten Association, the Ministry of Education, and the Education Review Office.
- the "3 + 12" rule for monitoring children's absences
- recording accidents

These, along with the work involved with the introduction of the new early childhood curriculum, *Te Whariki*; the extra stress placed on staff by the policy of inclusion of

children with special needs without necessarily having appropriate support;[5] and the pressure for staff to update their training had all added greatly to the burden of being a kindergarten teacher.

The interviews opened with a general overview question to teachers:

> *Do you believe the change of group-size policy has had an impact on your kindergarten?*

In most respects the responses made by teachers provided a summary of the issues pursued in more depth in later questions. The answers varied according to the roll size of the kindergarten.

30/30 Kindergartens

As we have seen, teachers from 6 kindergartens with 30/30 rolls were included in the interviews. Three of these kindergartens had not had any change in roll numbers so the new policy had not had any direct impact. One kindergarten had had an increase of roll from 25/25 to 30/30. The views expressed by teachers from this kindergarten were similar to those of teachers in 45/45 kindergartens discussed below. One kindergarten had had a decrease in group size and their adult/child ratio had improved. Previously they had had a 40/40 roll with 2 teachers but now had a 30/30 roll with 2 teachers. The sixth 30/30 kindergarten was newly established so staff were not in a position to comment on the impact of changes as far as their present experience was concerned. We had stressed at the outset of the interview that we wanted staff to confine their comments to the kindergarten they were currently working in, but from time to time staff who had prior experience in other settings, particularly with larger groupings of children, did make comments based on earlier experiences and they tended to echo the opinions of teachers now working in 45/45 kindergartens.

Two points made by teachers in 30/30 kindergartens were significant:

- The change in group-size policy may not have had a direct impact on 30/30 kindergartens but it had had an indirect impact in that parents commented favourably on the small group size. This was particularly the case with parents of children who had changed kindergartens. Examples were given of children who found a move to a larger kindergarten daunting and were unsettled in the new environment, and others who had moved from a 45/45 kindergarten to a 30/30 and they, along with their parents, were much happier with the experience.

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[5] The number of children with special needs on the rolls of the kindergartens in the interview sample varied considerably from 3 kindergartens who had none to 1 which claimed to have 13, and others with as high as 5 or 6. The more typical pattern was for a kindergarten to have 1 or 2 such children on the roll.

- The new 30/30 kindergarten had been built to take 45/45 children but at present was only licensed to take 30/30, at the Kindergarten Association's request. Teachers and parents were strongly opposed to the possibility of a roll increase.

Two other issues raised by teachers from 30/30 kindergartens were:

- There were problems associated with having only 2 teachers present. No teachers wanted an increase in group size but they did find that there were occasions when it was necessary to have a third adult present, for example, if a child had an accident and needed medical attention.

- As funding is allocated on a per child per hour basis, 30/30 kindergartens receive less bulk funding than larger kindergartens. All kindergartens have to undertake fundraising activities, but some of the expenses of kindergartens with smaller rolls are similar to those with higher rolls, for example, heating and light. The smaller kindergartens have a smaller group of families to draw on for fundraising activities.

45/45 Kindergartens

Throughout, the interviews focused on the impact of the change in group size on children; on teachers; on the kindergarten programme; and on families. Obviously these factors are interrelated. The following is a summary of the views of the teachers in response to the first general question:

Impact on Children

- The number of children in the building at any one time was overwhelming, particularly when siblings accompanied parents.
- Children had to compete for equipment, space, and teacher time.
- One-to-one work with children was very hard to accomplish.
- There was little small-group work.
- Stress increased in wet weather with large numbers confined to indoor spaces.
- Learning experiences provided were less varied.
- The programme had to be modified, and activities kept simple, especially in the afternoon when the younger children attended.
- Noise level increased.
- Children started kindergarten younger which led to a range of problems.
- Teachers had to move constantly between groups of children so their interaction with children lacked quality and continuity.
- Quieter children tried to avoid larger groups of children.
- Children did not settle as well.
- Quiet children were overlooked.
- Children exhibited signs of frustration when they were unable to get teacher

attention.

- There was more potential for children's accidents.

Impact on Teachers

- Increased workload.
- Teachers were pulled in many directions.
- Their job had become supervisory, "crowd control".
- There were constant interruptions.
- In practice, 1 of the 3 teachers was always involved in non-teaching tasks so that the other 2 had a ratio of 1/22.
- The presence of relievers added more stress.
- Parent/teacher relationships were stretched because of less time per family.
- Teachers felt they did not know children or families well and could not always talk with parents about their child's day.
- Teachers felt less effective as teachers; they were nurturing rather than teaching.
- Constant pressure to keep rolls full.
- Younger children took more teacher time.
- Noise level increased.
- Teachers tended to react to the demands of the more vocal children.
- Teachers were not as quick to pick up on cues about children dropped by others.

Impact on Programmes

- Larger numbers frequently meant that the range of activities offered had to be limited, concentrating on those that were more basic, for example, simpler art activities and easier puzzles.
- Younger children lacked necessary skills to take part in more advanced activities.
- Activities that require supervision were more restricted, for example, water play and cooking.
- Children missed out on, for example, screen printing, sewing, threading, staplers, felts, sellotape, fingerpaint, and scissors.
- There was conflict amongst children over resources and equipment.
- There was increased wear and tear of equipment.
- The increased noise level made some activities difficult, for example, reading stories over noise was impossible.
- The larger quantities of resources needed were expensive.

Impact on Families

- There were fewer opportunities for teachers to interact with families. The beginnings and ends of sessions were particularly difficult with extra parents present.
- With increased numbers of families for teachers to keep in touch with, families for whom English was a second language were inclined to miss out.
- Parents found helping was stressful with so many children present and were less inclined to volunteer. When they did volunteer they preferred to be given jobs to do rather than work with children.
- More parents were concerned about group size and ratios. They thought children would be overlooked.
- Important information was not being shared between teachers and parents because of inadequate communication.
- Parents stayed longer to settle children because children found the larger group daunting.
- In some kindergartens, parents missed out on induction programmes which have been suspended because of higher turnover.

Ratio in Relation to Group Size

In the previous section teachers' reactions to increased group size were summarised. We also asked the teachers:

> *If ratio is kept the same, but group size changes, does this have an impact on children and teachers?*

Once again this question was more relevant to some teachers than others because several had maintained both their ratio and group size while others, for example those moving from 40/40 rolls with 3 teachers to 45/45 rolls with 3 teachers, had increased both in group size and in child/adult ratio. Yet others had moved from 40/40 rolls with 2 teachers to 45/45 with 3. In this case the group size had increased but the ratio had either decreased or improved. There were no examples of kindergartens where the ratio stayed the same but the group size changed.

However, all teachers believed group size was more of a problem than ratio. The following points were made by teachers:

- Whatever the ratio, young children, particularly in a free-play programme, do not stay in groups of 15 children to 1 teacher. As children are usually engaged in activities of their own choosing, the number of children in any one group at any time varies enormously. The larger the total group size the greater the likelihood of children ending up in a larger group of children regardless of teacher/child ratio.

- The number of children in any one grouping is influenced by weather. It is common policy for at least 1 teacher to be outside and another inside. In fine weather large outdoor groupings are common. In wet weather larger groups inside lead to increased noise in confined spaces.

- Teachers are frequently called away, for example, to answer the phone, respond to a parent, or take enrolments. The numbers of these contacts increases as group-size increases. The remaining teachers are then responsible for an increased number of children.

- Group size takes over from ratio as the key issue: in a larger group, even if the ratio is improved, there are too many adults and children in one space which adds to noise and stress.

- Regardless of ratio, the group dynamics and atmosphere change with more children.

- Kindergarten teachers are accountable to families. Regardless of ratio if a kindergarten has a 45/45 roll, teachers have 90 families to get to know and keep in touch with (more if the kindergarten has shared places). This is too many.

- Regardless of group size, the present ratio is inadequate. The ideal would be 30/30 with 3 teachers.

- Another ideal situation would be a total group size of 40 with 3 trained teachers and a teacher's aide to free teachers from much of the routine and administrative load.[7]

Maintaining Maximum Child Enrolment

Kindergartens have to maintain maximum child enrolment to receive Ministry of Education funding. We asked the teachers if this had had any impact on their kindergarten.

Teachers from one kindergarten said that because theirs was a well established kindergarten with a large waiting list there had always been parental pressure to maintain full rolls. Teachers from all the other kindergartens thought the policy had impacted on their kindergarten in 1 or more of the following ways:

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[7] This was the case in one kindergarten we visited. The kindergarten had a 45/30 roll and the committee had agreed to employ a cleaner who doubled as a teacher aide during session time. This arrangement is outside Association policy.

- Increase in teacher stress because of the constant pressure to keep rolls up.

- Large numbers of children starting at any one time puts pressure on induction processes. Children used to be introduced to kindergarten gradually but now large groups may start together, particularly at the beginning of the year.

- Problems of shared-place policy, that is, 1 place may be shared by 2 children, each of whom attends only some sessions. Previously, if a family wanted their child to attend only for a limited number of sessions, the rest of the "place" was left free. Now teachers need to find another child to fill the gaps if income is to be more invited. Some children in shared placements attend more than 1 early childhood centre. At least one of the kindergartens in the study is no longer operating a shared-place policy because staff have found it too disruptive and confusing for children and it also means extra work for teachers because extra families are on the roll.

- Much depends on the stability of the community. Kindergarten staff can have difficulty in filling and maintaining rolls in communities with a transitory population, perhaps caused by a decline in the job market.

- Racial discrimination may also be a factor in kindergartens being by-passed by some families because of high non-European rolls.

- The introduction of the Ministry of Education's "9 + 12" rule for child attendance. According to this rule, if children are away for 9 calendar days (not sessional days) the parents must provide a doctor's certificate. Children may then be absent for a further 12 days without penalty. However, if at the end of this time they do not return to kindergarten they are taken off the roll and a replacement must be enrolled. Teachers have to follow up children not attending regularly which often involves home visits because families are not on the phone. The probability of needing to follow up children who do not attend regularly, increases as roll size increases.[8]
- Many children were starting kindergarten at an earlier age as a consequence of more children on the roll. In one kindergarten, for example, children were 7 months younger on average than they used to be, a few enrolling before 3; some were even

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[8] Teachers also believe this is a culturally inappropriate practice because Maori and Pacific Island children regularly spend periods of time with other members of their extended family. The policy also creates problems for parents with shared custody of their children. Where a child has left, it has consequences - for example, a head teacher tried to contact the parents of a child who had been away for 13 calendar days only to find the child was now living with her father and would not be returning. This had 2 consequences: it influenced the order and start dates of those on the waiting list; and the kindergarten could not claim for the missing days.

still in nappies. Teachers argue that kindergartens were not set up to cope with this age group. For children of the same age in childcare, the ratios would be better for children under 3 years.

- The presence of such young children had meant programmes had had to be changed to cope with a wider developmental range.

- Children were not necessarily ready to start kindergarten at an earlier age and teachers were not always ready to receive them. In the past, for example, if a group was unsettled teachers might wait before introducing a new child; now places must be filled immediately.

Finally, several teachers expressed their displeasure at recent letters they had received from the Kindergarten Association, quoting the dollar amount shortfall for which they were responsible. The teachers said that the letters were both "threatening and unpleasant". These teachers believed they were under constant pressure from the Association. However, they had received support from senior teachers, who said they were also unhappy about the letter.

The Link Between Maintaining Maximum Child Enrolment and Group Size

We asked the teachers:

> *Is there was a connection between maintaining maximum child enrolment and group size and, if so, what is the connection?*

Half of the teachers did not see a link or felt they had answered the question elsewhere. The others raised issues which had been raised earlier, namely:

- In order to maintain maximum enrolment and group size, children were being enrolled at a younger age which impacted on programme planning.

- One kindergarten which had had a group-size change had since also had a higher attendance figure.

- Teachers from another kindergarten did not see a connection between maintaining maximum child enrolment and group size but they also had higher attendance figures than previously which they attributed to the "9 + 12" rule. Children attended regularly to keep their place.

- Teachers did not allow roll numbers to slip. Previously they would not have started as many children at once as they did now but they were required to do so to receive

full funding.

- Bulk funding was the connection between maintaining maximum child enrolment and group size, that is, the need to generate funds. Kindergartens were given temporary licences until the ratio changed to 1:15. They could not have 3 teachers until they had the extra children to pay the salary.

Fluctuation in Group Size

The general view was that group size fluctuated less than it used to because of the necessity of maintaining full rolls. Attendance figures were also consistently high which some teachers saw as being linked to the "9 + 12" rule. Some parents interpret this policy as one of compulsory attendance. Once enrolled, children must attend all kindergarten sessions to keep their place. A view commonly held was that parents tended to send their children back to kindergarten earlier after an illness than they should because they did not understand the "9 + 12" rule and they wanted to safeguard their child's place. Several teachers expressed their irritation at the policy that even in the case of severe or chronic illness children were only entitled to 21 calendar days' absence before they lost their place. This was perceived as particularly inappropriate in an early childhood centre where attendance was voluntary.

While attendance was generally high, some children find attending sessions every day too much. Some children regularly miss a session a week without being affected by the "9 + 12" rule. There were differences according to locality. For example, in districts where there was a largely transient population group size did fluctuate but teachers were still required to maintain maximum attendance. Teachers from another kindergarten which served a wide geographic area and where families were on low incomes or unemployed, found that high attendance was maintained in the summer but dropped in the winter because parents did not have transport.

Links Between Group Size, Admission Age, and Turnover of Children

The group-size policy has influenced the age at which children are admitted to kindergarten and the rate of turnover of children. These factors have consequences for children. However, the pattern is by no means uniform across kindergartens. Of equal importance is the nature of the community served by the kindergarten. In several communities, described as stable by the teachers, the waiting lists which have always been long continue to be so, and children may not be admitted before 3 years 8 months or in a minority of cases not before 4 years. In other communities, the change in group-size policy has reduced the length of the waiting list which has led to younger enrolments, in at least 1 kindergarten as young as 2 years 9 months. In other cases the drop in age of admission is less dramatic, for example from 3 years 10 months to 3 years 2 months. However at this stage in children's development 8 months does make a considerable

difference. Once again teachers spoke of having to provide more "basic" programmes because children were less mature. Some children needed toileting. It was not uncommon for younger children to fall asleep during sessions. Not only were children younger, but the age range catered for in any session tended to be wider.

The older the children were on enrolment, the shorter time they were on the roll, so the higher the turnover of children. In these kindergartens, children seem to be constantly starting and moving on to school.

Other occurrences in the community can also influence waiting lists and enrolment patterns. In one community with a well-established kindergarten, for example, the waiting list was already long, but the waiting list had increased despite the policy that children must be admitted by age. Teachers put this increase down to population trends, an increase in transfers, and insufficient kindergartens in the area. A nearby private kindergarten which had catered for a large group of younger children had recently closed down.

The kindergarten in this study with the highest turnover of children was probably the one which had had a complete change in the afternoon roll in one term, 48 children being admitted. This meant staff were constantly socialising children and setting boundaries. Teachers felt it was hardly worthwhile to do much programme planning. One teacher compared her job to a tennis umpire's: "We need an umpire's chair placed in the middle of the room, with a whistle to blow every time we see a child do something inappropriate. It is crisis management!"

Prior to the drop in age of entry, it was common for children to attend some alternative form of early childhood centre before attending kindergarten. Teachers believe such experience usually made the settling-in problem at kindergarten easier.[9] Now that children start kindergarten at a younger age, prior experience at another type of early childhood centre was less likely.

As kindergartens are only allowed to have 4 percent of children on their roll under the age of 3, teachers in kindergartens with short waiting lists, or no waiting lists, find it difficult to maintain maximum group size. Instances were given of parents turning down places because they thought their child was too young to start kindergarten.

Maintaining full rolls for a larger group size does mean a higher turnover of children, particularly in communities with a transient population. One kindergarten, for example, was expecting to lose 26 children in the next 6 months. This in turn had repercussions for induction procedures. Because of the high turnover and number of children likely to start at any one time, induction procedures were more hurried and there was less opportunity to settle new children on an individual basis at the very time when this was particularly important because of the younger age group involved, and the larger group of children to

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[9] This confirms findings of earlier studies. In Renwick (1985) for example, it was found that 80 percent of families had been associated with at least one other preschool, if only an informal playgroup, prior to starting kindergarten. (p. 7)

be settled. Teachers repeatedly reiterated that young children found the size of the group daunting, particularly when they did not all have the skills to make friends. As one teacher put it: "Children are surrounded by a sea of faces. How do you make them feel safe?"

This was not a study of induction procedures, but the ways of introducing children and parents to kindergarten was one of a number of issues raised by teachers at various times during the group interviews. Comments ranged all the way from those who said their induction activities had not been influenced by the group-size policy to those who have moved from individual home visits to group entry procedures.[10] The most common comment was that because maintaining full and larger rolls had led to a higher turnover of children and more children and families had to be introduced to the kindergarten, induction procedures had suffered. Examples given were of home visits only taking place if requested by parents because teachers no longer had the time to visit all families and of children and parents being inducted directly into sessions because teachers no longer had time for special pre-entry sessions. In one of these kindergartens where 22 children had started during the term, the teachers felt a real problem had been created. Group feeling amongst the children was lacking because the dynamics of the group were constantly changing. Children and parents were missing out on pre-entry sessions because spaces have to be filled immediately to receive funding. This had repercussions because teachers believe that "induction set the tone. It informs parents what to expect of us, and what we expect of them." Because everything was so rushed, parents and teachers did not have time to establish a relationship.

One kindergarten now visited children at home at the time when the child moved from afternoon to morning sessions, but this change was not necessarily linked to the group-size policy. Another kindergarten said they still regularly made home visits because many parents were not on the telephone and visiting the home was a necessary means of keeping in touch.

The policy of admitting children by age rather than according to their place on the waiting list may also add to the teachers' workload. Older children may be put straight into the morning session without the chance to benefit from the experience of afternoon kindergarten which means they may lack some skills and have not learnt kindergarten routines. The change in admission policy relating to age makes it difficult for transfers because no places are reserved for them.

Not all teachers shared the same view about children transferring from one kindergarten to another. In one kindergarten the teachers perceived themselves as "lucky" because they had a number of transfers rather than inductions. They identified transfers as easier than inductions because as they are able to "slot" children straight into a space, there was usually less consequent movement of children, and fewer children were affected.

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[10] This is a trend that has been apparent for some time regardless of the change in group-size policy. *See*, for example, Renwick (1989), pp. 8-31.

A greater problem was probably caused by the "shared-place" practice because teachers frequently found it difficult to fill the gaps. Many families had to be dealt with when sharing a place. Teachers felt obliged to take a child if the parents wanted part-time kindergarten, but resented being made to feel "blamed" by the Association for the loss of dollars if they were unable to fill the remaining days.

Changes in Administrative Loads in Recent Times

We noted earlier in this report (*see* p. 19), that although some kindergartens were more adversely affected than others by the changes to group-size policy, all teachers expressed concern about increased administrative loads. Later in the interview teachers were asked what changes to administrative loads had occurred in recent times; whether or not these were connected with group size; and whether these administrative requirements and funding policies had had an impact on how teachers worked with children. As well as increased administrative loads, teachers believe other changes in kindergarten policies and practices, most of which have administrative components, have also added to the impact of group-size policy.

Teachers tended to repeat and expand on comments they had made earlier in the interview. The main areas of concern were:

- Increased administration as a consequence of bulk funding. Bulk funding was perceived by most teachers as being the real problem. The group-size policy was a consequence of bulk funding and it has been exacerbated by the impact of a range of other policies. The volume of paper work relates to group size. There were more children and families to document.

- The implication for staff of the Association's child-abuse policy.[11] A few teachers raised concerns about how the policy had had an effect on how teachers dealt with children, believing that the nature of the relationship had changed. Teachers are very conscious of being alone with children. A major impact is that only permanent, trained staff are allowed to change children's nappies or underwear which puts an increased burden on some teachers particularly when relievers are engaged, even if they are trained and used regularly. Parent helpers and teacher aides are also unable to assist in this way. Increased numbers means the permanent staff have to attend to more children.

- The policy of inclusion of children with special needs. Teachers claimed that it was

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[11] The Wellington Kindergarten Association policy on child abuse is based on recommendations made by the Ministry of Education and the Combined Early Childhood Union of Aotearoa (CECUA) in their guidelines for the prevention of child abuse. Individual kindergartens are required to have their own child abuse policy, but in many cases they have adapted and adopted the Association's policy.

rare to get extra help and questioned the sense of the policy which required kindergartens to apply for special-needs funding 6 months in advance, when teachers might not be aware of their likely requirements. As a consequence teachers might seriously consider whether or not they would admit a child with special needs when they rarely obtained the extra resources they needed to cope, and they have more children and families on their roll anyway.

- Increased record keeping and documentation for almost everything. Teachers felt under pressure because they were accountable to so many groups, but particularly the Kindergarten Association, the Ministry of Education, and the Education Review Office. It was very difficult to fit in time to carry out a child-assessment programme and to complete profiles on children - an Education Review Office expectation.

- The shared-place policy had increased the administration and the number of families kindergarten teachers have to deal with.

- Parents were required to sign the register each month which teachers consider to be too often and an overreaction by the Ministry to isolated problem cases - another example of teachers' professional competence being questioned and a lack of trust in them.

- Increased "voluntary donation" which most parents see as a fee.

- The "9 + 12" rule with no exceptions even for chronic illness, hospitalisation, or holidays. One of the kindergartens has had to remove 2 children due to hospitalisation in the families. Teachers were not able to make a professional judgment.

- The Association's directive to consult families more at the very time the number of families to be consulted has increased.

- The time needed to study and implement *Te Whariki*. The curriculum guidelines are difficult to put into practice with large groups. One of the tenets of *Te Whariki* is that children must have a sense of belonging. Teachers question whether this is possible with the teacher/pupil ratios and group size they and children have to contend with.

It was difficult to differentiate what teachers perceived to be the impact of administrative requirements and funding policies on how they worked with children from the impact of the group-size policy. As we have seen, teachers clearly believe the group-

size policy has reduced the amount of time they can spend with individual children and changed the nature of the programme, making it more controlled and formal which runs counter to the free-play philosophy. The added administrative tasks pose a rather different issue. The administrative loads are greater both because of increased administration, and because records involve more children and families. While some teachers said extra administration, particularly record keeping such as recording when children changed again, and ensuring parents signed rolls, had impacted on children because these tended to occur in sessional times, others said the impact of increased administrative requirements had been minimal on their work with children. There was more work to be done but teachers were working longer hours and did more in their own time. Some teachers claimed that administration took all their non-contact time, and they were now taking work home.

Salary bulk funding and other policies have compounded the group-size problems. The teachers interviewed were divided in their views as to how the added administrative load could best be coped with. For some the answer was clerical assistance in kindergartens. Others, resistant to having "untrained" staff in kindergartens, opposed clerical assistance on the grounds that those selected might not have sufficient understanding of kindergartens. They believe administration is closely linked to their role as teachers and that teachers should have more time allowance for administration.

A comment made by teachers at one kindergarten was that they no longer felt they could spare the time to have students on placement.

Changes in Policy and Practices of Other Agencies Which Have Added to Teacher Stress at a Time When Group Size Has Increased for Many Kindergartens

As well as the impact of administrative requirements within the kindergarten on teachers' role and workload, and changes in kindergarten policies and practices, all teachers believed that changes in the policy and practices of other agencies had added to teacher stress at a time when group-size had increased for many kindergartens. The following are examples given by teachers:

- The Privacy Act has had an impact on kindergartens. For example, the Act means parental contact is necessary prior to health checks. This places a burden on teachers with high roll numbers.

- The Fire Service has regulations about the maximum number in a building at any one time. Parents accompanying their children may put the kindergarten over the legal limit.

- There are more children in kindergartens with 45/45 rolls but fewer resources and less community support is not uncommon.

- One consequence of cuts in Special Education Service funding was the difficulty in getting appropriate support for children with special needs. Another was that it was difficult to get as much help from the Service.

- Reduced subsidies for childcare. In some cases this had meant an increase in the number of children attending kindergarten because families who previously used childcare could no longer afford to do so. As these children tended to be older than those on the waiting list they had priority and were settled in a level appropriate to their age.

- The number of shared placements had also increased because some parents who could no longer afford full childcare now wanted their child to continue attending childcare part time and also to attend kindergarten.

- Some teachers have noticed a significant drop in kindergarten donations which they attribute to redundancies, increasing mortgage rates, and market rentals in state houses.

- There was less liaison with schools by way of visits of children from the kindergarten prior to starting school because of child-abuse policies and the impact of schools' insurance policies.

Teachers' Training Needs and Professional Support

Teachers were asked:

> *Have you had, or are having, any particular training or professional development to help you to cope with changes in group size in relation to your work with children? Is the amount of professional support you receive influenced by group size?*

Teachers in the 30/30 and 45/30 kindergartens did not feel these questions applied to them and had no comment to make. The remaining teachers were largely negative in their responses, most saying they had had little or no appropriate support and any they had had was "too little and too late".

Teachers in one group interview said that the association had run a 1-day course to assist with the move from 2 to 3 teachers with an emphasis on team building and establishing relationships. But there was nothing on how to cope with the larger group size, nor any support for those kindergartens which already had 3 teachers but had had a roll increase.

Teachers in another group interview said that senior teachers had tried to help but they were also limited by time and resources. These teachers considered the senior teachers to be "the meat in the sandwich" coming under pressure from teachers in the field and from

the Association. In yet another group interview the teachers said they received less support now than they used to because the senior teachers also had increased workloads. Teachers also said they were wary about telling senior teachers too much in case it worked to their disadvantage.

The locality of the kindergarten may be a factor in the amount of support teachers believe they receive. For example, one group of teachers at a distance from Wellington thought that because their kindergartens were rather isolated, they probably received less support than teachers in more central locations. While these teachers acknowledged that senior teachers provided some support, there was little continuity because the senior teachers changed every term. Teachers believed they used to receive more visits, but decreased funding had meant fewer visits. They were also worried that their professional support hours were being used as travel time, so that senior teachers spent less time in kindergartens. In practice, these teachers relied on their close community networks for support.

It was not possible, through group discussion, to establish what the quality of the relationship between teachers and senior teachers was, or how often they met. Teachers from a number of kindergartens said they maintained regular contact with senior teachers. Others said senior teachers increased the workload rather than helped and that as they were unfamiliar with teaching large numbers of children they were of little assistance. There was a general perception that the first loyalty of senior teachers was to the Association.

Much of the teachers' ire was directed towards the Association. Teachers believe there has been a change in attitude towards them by the Association which, as one teacher put it, "has become dollar driven". Teachers generally felt that there had been little consultation with them about the change in group-size policy and that they had little guidance, training, or support. Others acknowledged that the association was itself in a difficult position because of the bulk-funding policy.

In 3 or 4 groups, teachers raised questions about what training would be appropriate anyway. How could they be helped? Through "crowd control workshops"? Support which was available was usually after hours and teachers said they were too tired to attend more than essential meetings. The costs associated with extra training were also cause for concern. Teachers believed extra courses were too expensive; for example, an Advanced Studies for Teachers (AST) course was $240 a paper. Whereas primary schools usually pay for teachers who take such courses, kindergarten teachers have to pay for themselves. First aid courses, in the view of teachers, should also be paid for by the Association, particularly as it is a Ministry of Education requirement that there must be at least 1 person with a current first aid certificate on the premises at all times.

CONCLUSION

This study is based on kindergarten teachers' perceptions of the impact on their kindergartens of the change in group-size policy. While all the kindergarten teachers interviewed believed that the change in group-size policy had had an impact on kindergartens, not all teachers had been affected, particularly those in kindergartens with 30/30 rolls.

The teachers believed that the changed policy had had a direct impact on children, programmes, teachers, and families. The major issues as presented by the teachers were:

- They had less time to work with individual children and small groups.
- Even though the adult/child ratio remained constant at 1:15, the larger group size was overwhelming for young children and had had a marked impact on the type of activities teachers were able to offer.
- Teachers were being forced more towards a supervisory role, rather than being able to focus on the educative role for which they had been trained.
- Increased roll numbers had had an adverse diluting effect on teachers' relationships with parents. Ninety families were too many for teachers to get to know and interact with effectively.
- In some kindergartens children were being admitted at a younger age which placed extra demands on teachers.
- There had been little training or support for teachers to cope with the consequences of the new policy.

It is important that the new group-size policy is seen in the context of other changes that have occurred both within and outside the kindergarten movement. Within kindergartens, the most important are the introduction of bulk funding, the increased administrative load carried by teachers, and the implications of the policy designed to prevent child abuse. The focus of the interview questions was on the group size of kindergarten sessions and the ratio of teachers to children, but in their comments teachers frequently referred to salary bulk funding as being a policy change which had also had

negative effects on kindergarten management and programmes. They certainly reiterated the views of teachers reported on in Wylie (1992, 1993) that it was unlikely that the Government's aim of providing better opportunities for children would be realised through this policy.

It was clear that teachers were unhappy with the group-size policy and believed that 45 children per session was too large and 90 families too many for a teacher to get to know. However, we do not know if teachers were placed in a situation where they had to choose between 2 teachers to 40 children or 3 to 45 which they would choose. There were teachers who had previously worked in pairs who appreciated having a third staff member. As we said in the body of the report the clear preference of teachers was for both smaller group size and lower teacher/pupil ratio. The most satisfied teachers were those from kindergartens which were either 30/30 with 2 teachers; or kindergartens which had 45 children with 3 teachers in the morning but had smaller numbers in the afternoon when younger children attended; or the 1 kindergarten which had a 45/30 roll with 3 teachers (2 full time and 1 part time), plus a teacher aide paid for by the committee.

The effects of group size on children were not observed in this study but the teachers' views on the impact of group size on children are certainly supported by much of the international research included in the literature review which was also part of this study, particularly that undertaken in the United States. As was pointed out in the literature review, according to Collins (1983) (*see* p. 6) in classes with smaller overall group size, regardless of staff/child ratios, teachers were more actively involved with the children, interacting with them rather than managing and controlling them. Other researchers echoed the concerns of parents about large group size as reported by teachers in our study. For example, Leu and Osborne (1990) (*see* p. 8) concluded that parents should consider group size to be an important factor in selecting an early childhood centre for their children.

However, it should also be noted that a number of researchers commented that staff/child ratio and group size should not be seen in insolation as the key determinants of quality early childhood centres. Other factors such as well-qualified and stable teachers along with the nature of the programmes offered are obviously crucial and interactive factors. This research did not observe teachers or programmes but we were impressed with the apparent professionalism and commitment of the teachers interviewed. As the interviews took place in kindergartens we were also able to observe the stimulating environments provided for children even though the kindergartens were not in session.

One of the most marked impacts of the group-size policy has been on teacher morale which many teachers claimed was at a low ebb. It would be difficult to overestimate the feelings of frustration and anger expressed by many teachers when they compared their present job with how they perceived it to have been prior to the change in group-size policy. Head teachers in particular believe that their professional skills are less valued and they are prevented from using them effectively, particularly in their work with children. Their authority and autonomy have been diminished. They consider their job to have

become one of "crowd control" and they miss the quality of the teacher/child interaction which they used to provide.

Many teachers also believe prospective parents are discouraged and that the faith parents had in the kindergarten service has been eroded as they observe the effects on their children of large groups.

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APPENDIX I

KINDERGARTEN GROUP SIZE PROJECT QUESTIONNAIRE

INTRODUCTION

The New Zealand Council for Educational Research is an independent organisation whose purpose is to foster research into educational issues and to publish information and give advice on educational matters. It receives financial support from the state and many other bodies, but is not attached to a government department or to any other institution.

This survey is part of a study being carried out by the Wellington Region Free Kindergarten Association. This questionnaire is designed to collect background information from kindergarten teachers who are participating in the study. Teachers are asked to complete the questionnaire and return it to NZCER staff at the Focus Group Interviews.

CONFIDENTIAL

All material collected will be regarded as confidential and will be used for research purposes only.

INSTRUCTIONS

Please answer this questionnaire

EITHER by ticking in the appropriate space
OR by writing in the space provided.

DEMOGRAPHIC PROFILE OF KINDERGARTENS

Name of your kindergarten_____

1. What is the socio-economic profile of the children at this kindergarten? **(please tick one)**

   __ wide range
   __ mainly middle income
   __ mainly low - middle income
   __ mainly low income /and on benefits
   __ other **(please describe)**

   _____

   _____

2. What is the employment profile of parents whose children attend this kindergarten? **(please tick one)**

   __ mainly in paid full-time employment
   __ mainly in part-time employment
   __ mainly self-employed
   __ mainly unemployed
   __ mainly students
   __ wide range

3. What is the ethnic profile of children at this kindergarten? **(please tick one)**

   __ mainly Maori
   __ mainly Pakeha / European
   __ mainly Pacific Island
   __ mixed **(please describe)**

   _____

   _____

4. What language is commonly spoken outside of the kindergarten? **(please tick one)**
   __ mainly English
   __ mainly Maori
   __ mainly a Pacific Island language **(please specify)**
   __ other **(please specify)**

   _____

   _____

5. How many special needs children are on your roll? No. of children _____

GENERAL

6. What impact does group size have on the learning experiences of children in your care?

   _____

   _____

   _____

   _____

   _____

   _____

   _____

7. What impact does group size have on parent /teacher communication and interaction?

   _____

   _____

   _____

   _____

   _____

_____

_____

8. How long have you been a kindergarten teacher? No. of years _____

Thank you for taking the time to complete this questionnaire. Please bring it with you when you attend the Focus Group Interview.

APPENDIX II

KINDERGARTEN GROUP SIZE PROJECT

INTERVIEW SCHEDULE

Bold type to be read aloud by interviewers.
Probes are in italics.

INTRODUCTION

There are two separate but related issues that I would like to us to think about during this discussion. The first is the overall group size of a kindergarten session. The second is the ratio of teachers to children within the group. As you know, some kindergartens have a role of 45 and others a role of 30, but the teacher/child ratio is the same: 1:15.
In our discussion would you please focus on the kindergarten you are working in now. Our main interest is in group size and the consequences for children, so wherever possible, could you relate your answers back to the children.

GROUP SIZE

1. **Do you believe the change of group size policy has had an impact on your kindergarten?** *(If yes, what are some of the effects?)*

   - *on children*

     - *consequences for children*
     - *1 to 1*
     - *small groups*
     - *children with challenging behaviour or special needs*
     - *child safety*

   - *on kindergarten programmes*

     - *range and type of activities*
     - *availability and maintenance of equipment*

   - *on teachers*

     - *teaching effectiveness*

- *preparation, planning and evaluation*
- *administration*
- *teacher workload*

• *adult/child interaction*

- *language*

• *Families and Communities*

- *voluntary help, including amount and range of activities undertaken by volunteers*
- *responsive to their needs: attendance for less than 5 days*
- *parent work*
- *parent/teacher communication*
- *knowledge of families' situations*
- *child behaviour*
- *families with children with special needs*

2. **We have been talking about the impact of group size on your kindergarten. If ratio is kept the same, but group size changes, does this have an impact on:**

a) children

What impact?

Why?

b) teachers?

What impact?

Why?

3. **Did you have a group size change in 1993?** *(If yes, in which direction)?*

4. **Kindergartens have had to maintain maximum child enrolment to receive Ministry funding. Has this had any impact on your kindergarten?**

5. **Is there a connection between maintaining maximum child enrolment and group size?** *(If 'yes' what is the connection)?*

6. **I'd like to talk now about attendance pattern. Does the size of the group fluctuate?**

Why?

9 and 21 rule

7. **Could we move on now to talk about admission and turnover of children. Is there a link between group size, and admission age and procedures?**

What is it and what are the consequences for children?

waiting lists

turnover of children

age of admission

age of children to plan for

transfers

induction/pre-entry activities, including home visits

settling in new children and welcoming families,

child/teacher interaction

group dynamics

teacher workload

parent/teacher relationships

shared place

acceptance of special needs children on the roll

8. **What changes to administrative loads have occured in recent times?**

9. **Are any of these connected with group size?**

10. **Have administrative requirements and funding policies had an impact on how you work with children?**

Are these changes affected by group size?

11. **Have there been any other changes in kindergarten policies or practices which have added to the impact of the group size policy?** *(If 'yes' what are they and what have the effects been)?*

- *child abuse*

- *full attendance figures*

12. **Have there been any changes to the policy and practices of other agencies e.g. Social Welfare, which have added to the impact of the group size policy?** *(If 'yes', what are they, and what have the effects been)?*

- *reduced subsidies for some families*

TEACHERS' TRAINING NEEDS AND PROFESSIONAL SUPPORT

I would like to move on now to discuss teachers' training needs and professional support.

13. **Have you had or are you having, any particular training or professional development which is helping you to cope with changes in group size in relation to your work with children?**

What was it?

Are training needs being met?

Do you have access to training?

14. **Is the amount of professional support that you receive influenced by group size?**

- *peer support*

- *senior teachers*

QUESTION FOR 45/30 KINDERGARTENS ONLY

15. Tell us about the impact of having a mix of part-time and full-time staff.

CONCLUSION

Have you any documents or records which you think we would find helpful?

Thank you. That is all we wanted to ask. Have you any other comments you would like to make?